integral shield. The shield may be attached to the board, such as with an end surface of the wall section being in contact with a grounding trace formed on the board, using fasteners, clips, or other mechanical means. Alternatively, the shield may be soldered or adhesively bonded to the board. An electrically-conductive coating or elastomeric gasket also may be interposed between the wall section of the shield and the board to improve the electrical contact therebetween.

Advantageously, the shield of the invention allows for a more economical construction as compared to metal stampings, while offering the designer the ability to fabricate shields having complex shapes but which still offer the thinner z-axis profiles which are attainable by the use of sheet metals. These and other advantages will be readily apparent to those skilled in the art based upon the disclosure contained herein.

BRIEF DESCRIPTION OF THE DRAWINGS

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawings wherein:

Fig. 1 is an exploded perspective view of a representative combination metal and plastic EMI shield in accordance with the present invention;

Fig. 2 is a bottom view of the shield of Fig. 1;

Fig. 3 is a cross-sectional view of the shield of Fig. 1 taken through line 3-3 of Fig. 2;

~~Fig. 3 is a cross-sectional view of the shield of Fig. 1 taken through line 3-3 of Fig. 2;~~

HVN 10-14-07

Fig. 4 is a cross-sectional, somewhat schematic view of an insert molding method for the manufacture of the shield of Fig. 1;

Fig. 5 is an exploded assembly view showing a representative printed circuit board (PCB) shielding application for the shield of Fig. 1; and

Fig. 6 is a magnified view of a cross-section of Fig. 4 showing the interface between the shield and the PCB in enhanced detail.

The drawings will be described further in connection with the following Detailed Description of the Invention.